

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A display device for displaying a three dimensional image such that different views are displayed according to different viewing angles, the display device including:

a display panel having a plurality of separately addressable pixels for displaying said image, the pixels being grouped such that different pixels in a group correspond to different views of the image as a function of an angle with respect to a first axis;

a display driver for controlling an optical characteristic of each pixel to generate a grey scale image according to received image data; and

a grey scale compensation device for further controlling light transmission characteristics of at least some pixels within a group to compensate for a predetermined viewing angle dependency of said optical characteristic in a second axis of the display panel, wherein the second axis is transverse to the first axis.

2. (Previously Presented) The display device of claim 1 further including a back panel for providing a plurality of discrete sources of illumination, each group of pixels in the display panel being positioned to receive light from a respective one of the discrete sources of illumination.

3. (Previously Presented) The display device of claim 2 in which the back panel provides a plurality of line sources of illumination.

4. (Previously Presented) The display device of claim 2 in which the back panel provides a plurality of point sources of illumination.

5. (Previously Presented) The display device of claim 2 in which the display panel is a light-transmissive display panel adapted for viewing from a side opposite to a side on which the back panel is located.

6. (Previously Presented) The display device of claim 1 further including a lenticular array positioned adjacent to the display panel, each lenslet within the lenticular array focusing light from selected pixels in the display panel.
7. (Previously Presented) The display device of claim 6 in which each lenslet within the lenticular array is associated with a group of pixels.
8. (Previously Presented) The display device of claim 1 in which the display driver and grey scale compensation device in combination are adapted to control the amount of light passing through each pixel according to a grey scale image to be displayed.
9. (Previously Presented) The display device of claim 1 in which the grey scale compensation device comprises a look-up table containing correction values to be applied in respect of each pixel within a group.
10. (Previously Presented) The display device of claim 8 in which the correction values are selected according to a viewing angle of a respective pixel within a group.
11. (Previously Presented) The display device of claim 10 in which the correction values are selected so as to substantially normalise a grey scale intensity displayed by a group of pixels to be independent of viewing angle.
12. (Original) The display device of claim 9 in which the look-up table includes substitution values or offset values as a function of viewing angle to be applied to a frame store.
13. (Previously Presented) The display device of claim 1 in which the grey scale compensation device comprises a transmission versus voltage characteristic, and the grey scale compensation device is adapted to adjust a pixel drive voltage and/or current received from the display driver.

14. (Original) The display device of claim 13 in which the grey scale compensation device provides a voltage and/or current offset to the pixel drive voltage and/or current received from the display driver.

15. (Currently Amended) The display device of claim 1 in which inherent optical characteristics of the display panel are configured such that viewing angle dependence is reduced or substantially minimised relative to the first axis which is a y-axis and the grey scale compensation device serves to reduce or substantially minimise viewing angle dependence relative to an axis that is transverse to the y-axis.

16. (Currently amended) The display device of claim 15 in which the grey scale compensation device serves to reduce or substantially minimise viewing angle dependence relative to [[an]] the second axis which is an x-axis, wherein the second axis [[that]] is orthogonal to the y-axis (i.e. the x-axis).

17. (Original) The display device of claim 16 incorporated into an object, in which the x-axis is defined as the horizontal axis when the object is in normal use, and the y-axis is defined as the vertical axis when the object is in normal use.

18. (Currently amended) A method for displaying a three dimensional image on a display device such that different views of the image are displayed according to different viewing angles, the method comprising the steps of:

processing image data to form grey scale pixel data values for each one of a plurality of separately addressable pixels in a display panel, the pixels being grouped such that different pixels in a group correspond to different views of the image as a function of an angle with respect to a first axis, the pixel data values each for controlling an light transmission characteristics of a respective pixel to generate a grey scale image;

applying grey scale correction values to at least some pixel data values within each group to compensate for a predetermined viewing angle dependency of the an optical characteristic in a second axis of the display panel, wherein the second axis is

transverse to the first axis, by controlling an amount passing through each pixel according to a three dimensional grey scale image to be displayed; and

using the corrected pixel data values to drive pixels of a display panel to generate said image.

19. (Cancelled).

20. (Original) The method of claim 18 in which the grey scale correction values are obtained from a look-up table containing correction values to be applied in respect of each pixel within a group.

21. (Previously Presented) The method of claim 20 in which the grey scale correction values are selected according to a viewing angle of a respective pixel within a group.

22. (Previously Presented) The method of claim 21 in which the grey scale correction values are selected so as to substantially normalise a grey scale displayed by a group of pixels to be independent of the viewing angle.

23. (Previously Presented) The method of claim 18 in which the grey scale correction values are derived from a transmission versus voltage characteristic of the display panel, the corrected pixel data values being used to adjust a pixel drive voltage and/or current applied to the display panel.

24. (Currently Amended) The method of claim 18 further including the step of configuring inherent optical characteristics of the display panel such that viewing angle dependence is reduced or substantially minimised relative to the first axis which is a y-axis and applying said grey scale correction values so as to reduce or substantially minimise viewing angle dependence relative to an axis that is transverse to the y-axis.

25. (Currently Amended) The method of claim 24 in which the grey scale correction values are applied to reduce or substantially minimise viewing angle dependence relative

to [[an]] the second axis which is an x-axis, wherein the second axis [[that]] is orthogonal to the y-axis (i.e. the x-axis).

26. (Original) The method of claim 25 in which the x-axis is the horizontal axis when the display panel is in normal use, and the y-axis is the vertical axis when the display panel is in normal use.

27. (Currently amended) A computer program product, comprising a storage medium having thereon computer program code ~~adapted, when said computer program code is loaded onto a computer, to make the computer execute~~ that is executable when loaded onto a computer, comprising:

instructing the computer to execute the method of claim 18.

28. (Cancelled).